CULTURAL RESOURCE ASSESSMENT SURVEY UPDATE ADDENDUM AND ADDITIONAL INVESTIGATIONS AT [redacted]

TECHNICAL MEMORANDUM

TAMPA INTERSTATE STUDY
SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

I-275 from Howard Frankland Bridge to
North of Dr. Martin Luther King, Jr. Boulevard
and
I-4 from I-275 to East of 50th Street with New Alignment from I-4 South to the Existing Selmon Expressway and Improvements to the Selmon Expressway From the Kennedy Boulevard Overpass East to Maydell Drive

Segments 1A, 2A, 2B, 3A, and 3B

Work Program Item Segment No.: 258337-2

Prepared for:

Florida Department of Transportation
District Seven
11201 N. McKinley Drive
Tampa, FL 33612-6456

June 2020

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Florida Department of Transportation
District Seven
11201 N. McKinley Drive
Tampa, FL 33612-6456

Prepared by:

Janus Research
1107 N. Ward Street
Tampa, FL 33607

June 2020

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1. INTRODUCTION

At the request of the Florida Department of Transportation (FDOT), District 7, Janus Research conducted a cultural resource assessment survey (CRAS) update for the proposed revised footprint of two Stormwater Management Facility (SMF) sites [redacted] and additional investigations for [redacted] for the Tampa Interstate Study (TIS) Project in Tampa, Hillsborough County, Florida. The current project is located in the 1996 TIS Final Environmental Impact Statement (FEIS) Segment 2B. A CRAS Update Addendum was conducted for proposed SMF sites in April 2020 (Janus Research 2020).

The objective of the current project was to identify cultural resources within the proposed revised footprint of [redacted] and assess the resources in terms of their eligibility for listing in the National Register of Historic Places (NRHP) according to the criteria set forth in 36 CFR Section 60.4. The objective of additional investigations at [redacted] was to determine the site's eligibility for listing in the NRHP.

This addendum complies with Section 106 of the *NHPA of 1966* (Public Law 89-665, as amended), as implemented by 36 CFR 800 -- *Protection of Historic Properties* (incorporating amendments effective August 5, 2004); Stipulation VII of the *Programmatic Agreement among the FHWA, the ACHP, the FDHR, the SHPO, and the FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida* (Section 106 Programmatic Agreement, effective March 2016, amended June 7, 2017); Section 102 of the *NEPA of 1969*, as amended (42 USC 4321 et seq.), as implemented by the regulations of the CEQ (40 CFR Parts 1500–1508); Section 4(f) of the *Department of Transportation Act of 1966*, as amended (49 United States Code [USC] 303 and 23 USC 138); the revised Chapter 267, *FS*; and the standards embodied in the FDHR's *CRM Standards and Operational Manual* (February 2003), and Chapter 1A-46 (*Archaeological and Historical Report Standards and Guidelines*), *Florida Administrative Code*. In addition, this report was prepared in conformity with standards set forth in Part 2, Chapter 8 (*Archaeological and Historical Resources*) of the FDOT *PD&E Manual* (effective June 14, 2017). All work conforms to professional guidelines set forth in the *Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 Federal Register [FR] 44716, as amended and annotated). Principal Investigators meet the *Secretary of the Interior's Professional Qualification Standards* (48 FR 44716) for archaeology, history, architecture, architectural history, or historic architecture. Archaeological investigations were conducted under the direction of James Pepe, M.A.

Information regarding the environmental setting, prehistoric overview, historic overview, literature search, and site file review in the project area are included in the 2018 TIS CRAS Update (Janus Research 2018) and therefore are not repeated in this addendum.

[redacted]

2. PREVIOUS INVESTIGATIONS

The original footprint of [redacted] were surveyed for the *CRAS Update Addendum Technical Memorandum TIS SEIS I-275 from Howard Frankland Bridge to North of Dr. Martin Luther King, Jr. Blvd and I-4 from I-275 to East of 50th St with New Alignment from I-4 South to the Existing Selmon Expressway from the Kennedy Boulevard Overpass East to Maydell Drive* (Janus Research 2020). [redacted]

Site [redacted] was initially identified by three positive shovel tests. A total of 116 lithic artifacts were recovered during the original survey including two cores, two scrapers, and one unifacial flake tool. Although disturbed soils were identified within the shovel tests, it appeared that most of the lithic material was from an undisturbed context. No temporally diagnostic artifacts were recovered. The site was determined to date to the Archaic period based on the lack of pottery. There was insufficient information to determine the NRHP eligibility of the site.

Archaeological Probability

The background research to determine archaeological probability of [redacted] was provided in the 2020 CRAS Update Addendum and is not repeated here. [redacted] were originally determined to have moderate archaeological site potential due to the proximity of Spanish-American War encampments in the vicinity. The unsurveyed portions of [redacted] were considered to have high archaeological site potential due to the proximity to [redacted] and an isolated lithic flake recovered from the [redacted].

3. METHODS

Archaeological Methods

<u>Archaeological Field Methods</u>

Within the proposed revised footprint of [redacted], the archaeological field survey included a surface inspection of exposed ground to look for evidence of archaeological sites and shovel testing within the previously unsurveyed portions of the proposed revised footprints. The field survey also included additional shovel tests to determine the limits and bound site [redacted]. The pedestrian survey included documentation of the presence of buried utilities. Archaeological testing is not conducted within utility corridors for several reasons: the area has been disturbed by the excavation and burial of the utility, concern for the safety of archaeological field teams, and potential for substantial fines if a utility is damaged.

Subsurface testing employed conventional shovel testing throughout the investigation. Shovel tests were circular and roughly 50 centimeters (20 inches) in diameter. They were excavated to a minimum depth of 1 meter (39 inches), unless excavation was inhibited by the presence of very compact hardpan, limestone, or fill material. All excavated soil was dry screened through 0.64 centimeter (¼ inch) hardware cloth suspended from portable wooden frames. Shovel tests were excavated at 25-meter intervals within previously unsurveyed areas.

Standard archaeological methods for recording field data were followed throughout the project.

The identification number, location, stratigraphic profile, and soil descriptions were recorded for every shovel test excavated. The locations of all tests were plotted on field aerial maps of the project APE and recorded with WAAS-enabled hand-held Global Positioning System (GPS) units (UTM-NAD83).

Phase II Testing

The additional archaeological investigations at [redacted] consisted of additional shovel-testing as well as the excavation of one 1 x 2 meter test unit.

Additional shovel tests were excavated at 12.5 and 25 meter intervals. Additional shovel tests were not excavated near areas with buried utilities. The shovel tests were approximately 50 cm (20 inches) in diameter and were dug to a minimum depth of 1 meter. All excavated soils were sifted through 6.4-millimeter (¼ inch) metal hardware cloth screen suspended from portable wooden frames. All cultural materials recovered were stored in plastic bags and all provenience data was recorded. Standard archaeological methods for recording field data were followed throughout the project. Upon completion of each shovel test, the identification number, location, stratigraphic profile, and soil characteristics were recorded. The locations of all tests were plotted on a field aerial map. Photographs and GPS readings (UTM NAD 83) were taken for all shovel tests.

Additional investigations also consisted of the excavation of one 1 x 2 m test unit. The unit was excavated near the shovel test with the highest artifact density. In order to safely investigate deeper levels of the site, only the western half of the unit was excavated from 80 to 110 centimeters below datum (cmbd). The shallower depth of the eastern half would allow for quicker egress in case of wall collapse. Finally, a shovel test was excavated into the bottom of the western half of the unit. The shovel test was excavated to the depth of 225 cmbd.

During excavation of the unit, vertical control was maintained using line levels and metric tapes with a datum located at the northeast corner of the test unit. The datum was set at 10 centimeters above surface at the northeast corner of the unit. The units were excavated in natural stratigraphic zones that were subdivided, when feasible, into 10-centimeter arbitrary levels to provide further vertical control. All excavated soils from this unit, including soils from the basal shovel test, were sifted through 6.4-millimeter (¼ inch) hardware cloth. Upon completion of the unit, stratigraphic profiles were drawn. In addition, GPS readings were taken for the unit. All artifacts collected were bagged and recorded with the appropriate provenience information on the field bags. Within the excavation unit, artifacts collected from separate stratigraphic zones and arbitrary levels were bagged and recorded separately. All artifact bags were assigned Field Specimen (FS) numbers in the field.

<u>Laboratory Methods</u>

Laboratory processing included cleaning, cataloguing, and the temporary storage of artifacts recovered during the testing. Artifacts were carefully washed clean of sand and dirt and allowed to air-dry. All materials were processed by their provenience. Initial sorting of the artifacts was done during the re-bagging of materials after they were washed and air dried. Artifact analysis involved the morphological and functional classification of artifacts and, the determination of temporal/cultural affiliations, if possible. Methods specific to the various categories of artifacts recovered during the survey are summarized below.

Lithic Artifacts

The lithic artifacts were analyzed to determine a functional interpretation and, if possible, a cultural affiliation for each site. Lithic artifacts were initially separated into two categories: waste flakes and tool forms/manufacture failures. Any tool forms, manufacture failures, or suspected utilized flakes that had not been identified in the field were removed, bagged separately, and set-aside for a more thorough analysis using a technological approach modeled after the concept of *chaine operatoire*, translated as "operational sequence." This approach is described as "the different stages of tool production from the acquisition of raw material to the final abandonment of the desired or used objects" (Bar-Yosef et al. 1992:511). The final goal of such analysis is to reconstruct the operational sequence (Pelegrin et al. 1988). The theoretical basis is that the identification of the most frequently recurring of these choices will enable the archaeologist to characterize the technical traditions of the social group (Bar-Yosef et al. 1992:511). Cultural aspects of the social group are expressed in these technical choices. The functional analysis of the stone tools also indicates how these tools were utilized. The spatial analysis of lithic artifacts can demonstrate the spatial organization of some technical activities and the socio-cultural choices that conditioned such activities. This approach contrasts with the typological approach that concentrates on the product alone, as opposed to the complete process of lithic exploitation (Crabtree 1972:51).

The techno-morphological analysis consists of describing the lithic artifact using technological criteria such as the technique used to produce the lithic artifact (hard/soft hammer percussion, pressure technique, etc.), the interior platform angle (Whittaker 1994:90), and the measurements (length, width, thickness of the lithic artifact). Two major technological processes can be archaeologically identified: tool manufacturing and core reduction. The occurrence of tool manufacturing at a site is generally indicated by the presence of retouch flakes, point-shaping flakes, bifacial thinning flakes, and tools or tool fragments. Core reduction is indicated by the presence of cores, primary core reduction flakes, or secondary core reduction flakes. The function of the site is interpreted by the presence or absence of these activities. Tool manufacturing is the most common activity, characterizing most lithic scatters in Florida. Core reduction is often the sign of a larger site insofar as it requires a large quantity of raw material and a significant investment of time and energy. Usually, this type of assemblage indicates a habitation site of at least seasonal occupation, while the presence of intensive core reduction and tool-manufacturing activities suggests a larger, more permanent habitation site.

All identified lithic tools and tool fragments were analyzed macroscopically and microscopically for edge scarring or other types of use wear. Investigations by Keller (1966), Brink (1978), Tringham et al. (1974), Odell (1980, 1981), Vaughan (1985), and Ballo (1985) have demonstrated that the use of stone tools on various materials will result in characteristic edge scarring. Edge scarring in the form of scalar, hinge, and step fractures, polish, and edge rounding provide evidence of the kind of material worked. The location of the damage suggests the mode of tool activation, i.e., cutting, slicing, drilling, scraping, or chopping.

Thermal alteration is a method of altering siliceous material in an effort to make the stone more vitreous (Crabtree 1972:94). Thermal alteration has been shown to improve the flaking quality of certain lithic materials and to facilitate the production of thinner tools with sharper edges (Mandeville and Flenniken 1974:146–148; Rick 1978:44–56). Several criteria have been employed in determining that heat treatment has occurred, including increased luster, red to pink coloration, and evidence of heat fracturing such as potlid scarring (circular, concave flake scars) and crazing (minute cracking). Experimental studies (Mandeville and Flenniken 1974) and archaeological investigations (Anderson

1979; Collins and Fenwick 1974; Purdy 1981; Schindler et al. 1982; Ste. Claire 1987) have suggested that thermal alteration was probably undertaken while the material was in a late blank or early preform stage of reduction.

In addition to morphological and technological analysis of the lithic artifacts, an attempt was made to identify the raw material of which the artifacts are composed. The process of assigning each lithic artifact to a specific geological provenance was conducted following the “quarry-cluster” method originally developed by Upchurch et al. (1982). A quarry cluster is a group of chert outcroppings within a single geological formation that exhibit a combination of qualitative characteristics distinct enough to distinguish them from other exposures (Austin and Estabrook 2000:116). Most of the chert formed in Florida is the result of silica (SiO_2) replacement of limestone rather than chemical precipitation. As a result, many characteristics of the original parent limestone formation have been preserved in place. Upchurch et al. (1982) identified 19 quarry clusters within Florida’s limestone formations, and Austin (1997) and Austin and Estabrook (2000) have further refined these into 16 groups based on raw material samples from 200 different locations.

In general terms, the quarry-cluster method is an attempt to develop a practical way to source chert with a reasonable degree of accuracy without resorting to expensive and time-consuming procedures. Consequently, the method is dependent on identifying features and inclusions within a chert outcrop that can be observed with the unaided eye or a low-power microscope (30x to 70x). These include fossils, quartz sand inclusions, calcite crystals, phosphate pellets, pelloids, porosity, pore and cavity crystallization, and the granularity of the rock matrix (Austin 1997). Pelloids are broadly defined here as any unidentifiable inclusions that lack internal or external structure. In addition, the color and luster of the material can also be helpful. By comparing the characteristics of different quarry clusters to an assemblage of chert artifacts, the regional, and sometimes local, provenience of individual artifacts can be determined. Given that the total range of variation within a particular formation has been well sampled, sourcing chert with these methods is considered to be highly accurate (Austin and Estabrook 2000).

All lithics recovered were analyzed and compared with a type collection of samples from the various quarry clusters to look for similarities in color, texture, fossil content, and other inclusions. They were also examined and classified when possible based on the available descriptions of the material in the extant literature (Austin 1996 and 1997; Austin and Estabrook 2000; Endonino 2007; Goodyear et al. 1983; Upchurch et al. 1982). These artifacts were examined with the aid of an American Optical 7x to 42 x binocular microscope to better identify index fossils and other inclusions within the rock fabric.

Historic Artifacts

Historic artifacts were first sorted by material type, then identified and tabulated in order to determine a site's chronological placement and function. Standard references for historic artifacts as well as primary sources materials such as catalogues and manufacturer's production information were used to help identify artifacts. Ceramics were classified by such attributes as ware type and morphology/function. Similarly, glass was classified in reference to such attributes as color, vessel form and function, and manufacture marks such as seams and lip treatment.

4. RESULTS

The archaeological survey included shovel testing within the proposed revised footprint of [redacted] and additional shovel testing and the excavation of one test unit to assist in determining the NRHP eligibility of [redacted]. No archaeological sites were identified within [redacted] Additional testing determined that [redacted]

Two shovel tests (ST 75 and 76) were excavated within the previously unsurveyed portion of the proposed revised footprint of [redacted] No cultural material was recovered. Three negative shovel tests (ST 39, 40, and 42) had previously been excavated within the pond footprint during the survey of the original SMF site. During the bounding of [redacted] (see below) four additional shovel tests were excavated within the northwestern portion of the revised SMF site. Cultural material was recovered from two of the tests. One lithic flake and one fragment of lithic shatter was recovered from ST 70, whereas three lithic flakes were recovered from ST 73.

The previously unsurveyed portion of [redacted] consists of two vacant grassy lots [redacted]). The former structures on the lots were demolished circa 2013 and 2015. Soil stratigraphy consisted of yellow sand fill 0 to 10 centimeters below surface (cmbs), light gray sand 10-15 cmbs, and pale brown sand 15-110 cmbs (Figure 4-3).

Six shovel tests were excavated within the proposed revised footprint of [redacted] No cultural material was recovered. [redacted] consists of grassy vacant lots with scattered oak trees [redacted] except for the westernmost lot which contains an extant house. Bounding shovel tests for the archaeological occurrence to the west of the proposed revised footprint could not be excavated since the western lot was not accessible. The shovel tests revealed some soil disturbance. Soil stratigraphy consisted of mottled gray and pale brown sand 0 to 20 cmbs and pale brown to light gray sand 20 to 100 cmbs (Figure 4-5).

[redacted]

[redacted]

Figure 4-3: Shovel Test 75, facing East

[redacted]

Figure 4-5: Shovel Test 59, facing Southeast

[redacted]

During the current additional investigations, eleven additional shovel tests were excavated to refine the boundary for site [redacted] The soil stratigraphy consisted of disturbed soil with fill from the surface to depths ranging from 40 to 70 cmbs underlain by pale brown sand. Lithic artifacts were recovered from eight of these shovel tests. The lithics were recovered from 20-80 cmbs primarily in shovel tests excavated along the eastern edge of the site. Fewer than ten lithics artifacts were recovered from five of the shovel tests (Table 4-1). One historic artifact, a terrazzo fragment, was recovered from ST 65. The combined results of the initial testing and current investigations at the site indicate that the densest portion of artifact distribution is isolated to an area approximately 25 meters east-west by 12 meters north-south. This area was defined by five positive shovel tests (ST 43, 46, 63, 65, and 66). The total site area measures 75 meters by 50 meters. However, complete bounding of the site was restricted by the presence of buried utilities in several areas: water lines to the east, electricity to the south and west, and fiber to the west [redacted]

Table 4-1. Lithic Artifacts Recovered from Additional Shovel Tests

Shovel Test	Depth (cmbs)	Count
63	20-100	38
64	35-40	1
65	20-80	14
66	20-80	16
69	15-40	3
70	25-30	2
71	10-30	6
73	10-40	3
Total		**83**

One 2 meter by 1 meter test unit (TU) was excavated to the east of ST 46, from which the highest number of lithic artifacts were recovered during shovel testing. The test unit was excavated to 80 cmbd in the eastern half of the unit and 110 cmbd in the western half. A shovel test was excavated at the bottom of the western half of the unit. The shovel test was excavated from 110 to 225 cmbd. No cultural material was recovered from the shovel test. Lithic material was recovered from 15 to 50 cmbd in the unit.

Stratigraphy

The stratigraphy observed in the unit shows an area that was disturbed by the construction of [redacted]. Seven stratigraphic zones were identified (Figures 4-7 to 4-9). Zones 2-4 contained construction debris, historic artifacts, and lithic artifacts. The primary deposit of lithic artifacts was in Zone 3.

Zone 1, 10-20 cmbd, consists of dark gray sand and root mat. Modern trash was observed in the level, along with plastic, metal, glass, and building material.

[redacted]

Zone 2, 20-30 cmbd, consists of mottled brownish gray and pale brown soil. The stratum is very disturbed and contained modern trash, asphalt fragments, historic artifacts, and lithic debitage. The large amount of disturbance suggests that this stratum was disturbed [redacted]

Zone 3, 30-40 cmbd, consists of mottled grayish brown and brown sand. A substantial deposit of lithic artifacts was encountered in the eastern half of the unit. Historic artifacts and construction debris, concrete and friable sandy construction material, was also present in the stratum, including part of a bottle that dates circa 1900. This stratum appears to be fill material that was brought in or pushed here [redacted].

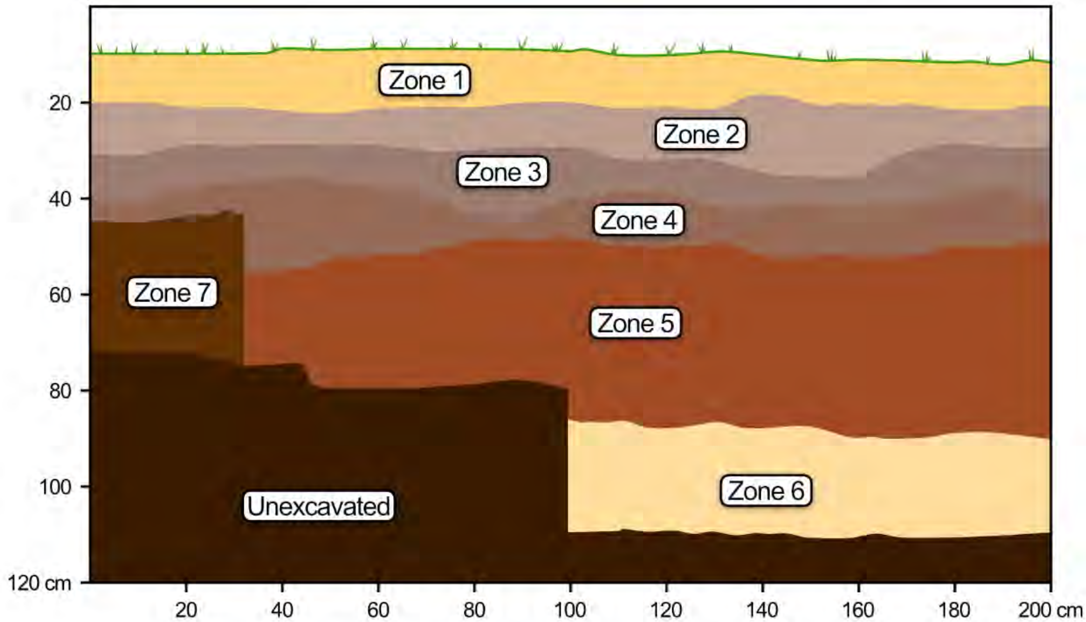
Zone 4, 40-50 cmbd, consists of very dark gray sand mottled with light yellowish-brown sand. The number of artifacts in this zone was substantially less than Zone 3, but lithic and historic artifacts were present. A pit feature was identified in the southeastern corner of the unit (Zone 7, see below). This stratum is likely the original ground surface.

Zone 5, 50-90 cmbd, consists of light yellowish-brown sand mottled with brown and grayish brown sand. Only a few lithic artifacts were recovered from the stratum. Some historic artifacts were recovered in the upper portion of the stratum.

Zone 6, 90-110 cmbd, consists of very pale brown sand. No cultural material was recovered.

A pit (Zone 7) was identified in the middle of zone 4 in the southeastern corner of the unit at about 45 cmbd. Two horseshoes (Figure 4-10) and a horse bone were identified in the pit at approximately 70 cmbd. This feature may represent a purposeful horse burial. The excavation of the pit ceased after the horseshoes and bone were encountered. The horseshoes and bone were reburied in the pit when excavation was complete. Based on the stratigraphy, the pit predates the two zones, Zone 2 and 3, which are most heavily disturbed and appear to be fill/spoil material. [redacted]

It is possible that the pit could be associated with the Spanish-American War troop encampments from early 1898. [redacted] It is also entirely possible that the horse burial pit could be associated with one of the 19th century settlers from the area.



Zone 1: Medium to Coarse Sand with Root Mat/Topsoil.
10 YR 5/2 Grayish Brown with 10 YR 6/2 Light Brown Gray

Zone 2: Mottled/Disturbed Zone with Construction Debris, Rocks, and Chert in Medium Sand Matrix
10 YR 4/2 Dark Grayish Brown with 10 YR 3/2 Very Dark Grayish Brown

Zone 3: Primary Deposit and Chert Lithics, Mixed with Construction Debris, Historic Artifacts, and Rocks in Sand
10 YR 5/2 Grayish Brown with 10 YR 3/2 Very Dark Grayish Brown

Zone 4: Mottle/Disturbed Zone, Fine Sand with Less Frequent Chert Lithics and Historic Artifacts
10 YR 4/1 Dark Gray and 10 YR 4/2 Dark Grayish Brown

Zone 5: Fine Sand with Organic Mottling and Some Historic Artifacts and Small Charcoal Pockets and Root Stains. No Chert
10 YR 5/2 Grayish Brown with 10 YR 7/2 Light Gray and 10 YR 8/3 Very Pale Brown

Zone 6: Fine Sand with Infrequent Organic Stains
10 YR 8/2 Very Pale Brown

Zone 7: Pit Disturbance, Heavily Mottled Sands Assocoiated with Pitfall
10 YR 4/1 Very Dark Grey 10 YR 8/2 Very Pale Brown,
10 YR 9/2 Light Gray, and 10 YR 6/2 Light Brown Gray

Figure 4-7: Test Unit A, South Wall Profile

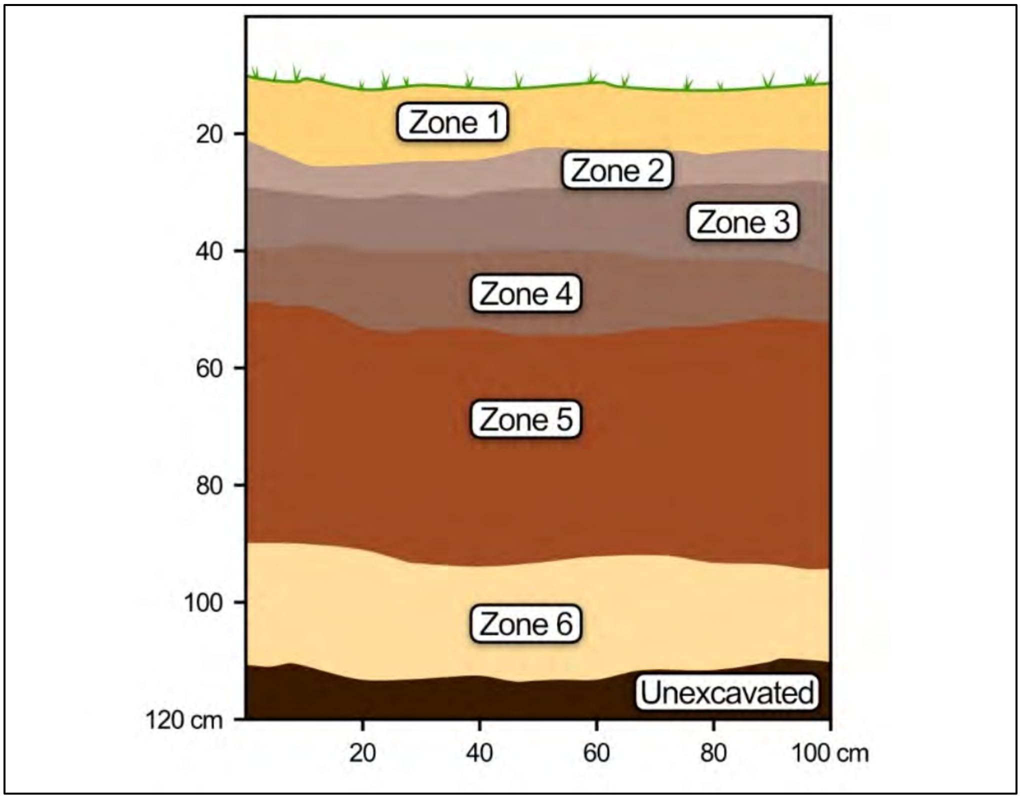


Figure 4-8: TU A, West Wall Profile

Figure 4-9: South Wall of Unit A, facing South

Figure 4-10: Horseshoes Recovered from Pit (Zone 7)

Artifact Analysis

Lithic Artifacts

A total of 1628 lithic artifacts were recovered during the additional testing. Eighty-three artifacts were recovered from the shovel tests (Table 4-1) and 1545 from the test unit (Table 4-2). The majority of the lithics were recovered from level 3 of TU A.

Table 4-2. Lithic Artifacts from TU A by Level

Zone	Level	Count	Percentage
2	1	20	1.3
2	2	124	8.0
3	3	1026	66.4
4	4	375	24.3
Total		**1545**	**100.0**

The lithic artifacts include tools (n=131), cores (n=21), flakes (n=1176), and shatter (n=300). No points were recovered from the site.

Utilized flakes, flake tools, and scrapers are the most common tool types (Table 4-3; Figures 4-11 and 4-12). All but eight of the tools were recovered from the unit. Seventy percent of the tools from the unit were recovered from level 3 (n=87), with 28 from level 4 and eight from level 2. The tools are described in Table 4-4. Most of the tools are expedient types: utilized flakes and flake tools. None of the tools are temporally diagnostic.

Table 4-3. Lithic Tools Recovered from 8HI14932

Tool type	ST 63	ST 64	ST 65	TU A, Level 2	TU A, Level 3	TU A, Level 4	Total
biface	-	-	-	-	1	1	2
bifacial blade	-	-	-	-	1	-	1
bifacial scraper	-	-	-	-	1	-	1
bifacially modified flake	-	-	-	-	1	-	1
blade	1	-	-	-	-	-	1
bladelet	-	-	-	-	-	1	1
core tool	-	-	-	1	2	1	4
end scraper	1	-	-	1	-	1	3
flake tool	2	-	1	3	25	6	37
preform	-	-	-	-	2	-	2
preform base	-	-	-	-	1	-	1
prismatic blade	-	-	-	-	1	-	1
scraper	-	-	-	-	20	5	25
utilized flake	1	1	1	3	32	13	51
Total	**5**	**1**	**2**	**8**	**87**	**28**	**131**

Figure 4-11: Lithic Core and Tools from Zone 2

Figure 4-12: Lithic Tools from Zone 3

Table 4-4. Description of Lithic Tools

Provenience	Tool type	Description	Length (mm)	Width (mm)	Thick (mm)	Lithic Source
TU A, Level 3	biface	broken base	65.42	35.3	13	
TU A, Level 4	biface	broken base	56.14	41.2	15.5	Suwannee Formation
TU A, Level 3	bifacial blade	bifacially modified cortical flake	72.62	39.56	23.92	Hillsborough River Chert
TU A, Level 3	bifacial scraper	curved shape complete bifacial tool	32.98	25.52	9.64	
TU A, Level 3	bifacially modified flake	proximal edge shaped & flaked	45.86	45	8.16	Hillsborough River Chert
TU 63, 20-80 cmbs	blade	microscarring along lateral and distal edge of complete SCR	53.18	35.08	13.3	Hillsborough River Chert
TU A, Level 4	bladelet	microscarring along small blade flake	15.4	12.02	3.92	
TU A, Level 2	core tool	edge created at distal end of core from platform	30.54	20.46	24.46	
TU A, Level 3	core tool	core worked to edge from platform	33.7	33.24	23.12	Ocala Limestone
TU A, Level 3	core tool	use wear at bottom of core. Unidirectional.	33.88	31.48	25.52	Hillsborough River Chert

Provenience	Tool type	Description	Length (mm)	Width (mm)	Thick (mm)	Lithic Source
TU A, Level 4	core tool	flaking from platform comes to a point. Usewear at sharp edge.	41.48	32.56	30.68	Hillsborough River Chert
TU 63, 20-80 cmbs	end scraper		56.14	46.18	14.5	
TU A, Level 2	end scraper	tool flaked around distal & lateral sides of flake	48.66	35.82	16.88	Hillsborough River Chert
TU A, Level 4	end scraper	flaking & usewear - distal end of flake	42.52	36.5	16.76	Suwannee Formation
TU 63, 20-80 cmbs	flake tool	Flake shaped and abraded into fingertip shape	37.02	24.6	7.84	Hillsborough River Chert
TU 63, 20-80 cmbs	flake tool	Flaking along distal lateral edge of complete flake	50.36	28.44	11.84	Hillsborough River Chert
TU 56, 20-80 cmbs	flake tool	microflaking on lateral edge of fractured tool	52.92	28.04	19.78	
TU A, Level 2	flake tool	flake shaped & abraded to a point on lateral edge. Use wear.	34.62	21.9	4.56	
TU A, Level 2	flake tool	shaped & abraded flake tool lateral & distal edge	54	40.66	9.02	
TU A, Level 2	flake tool	flaking at distal end of thick SCR end	63.7	37	27.32	Hillsborough River Chert
TU A, Level 3	flake tool	microscarring on lateral & distal edge of broken flake	30.28	32.46	8.54	Suwannee Formation
TU A, Level 3	flake tool	bifacial flaking of lateral edge of thick broken flake	50.98	34.14	22.32	Ocala Limestone
TU A, Level 3	flake tool	microscarring on lateral edge of PCR	38.6	24.02	16.24	
TU A, Level 3	flake tool	bifacial flake scarring on lateral edges of plane	41.74	24.64	16.94	Hillsborough River Chert
TU A, Level 3	flake tool	flake scarring on lateral edge of SCR	44.18	33.52	22.68	Suwannee Formation
TU A, Level 3	flake tool	lateral & distal edge of SCR flake	55.64	41.4	16.96	Ocala Limestone
TU A, Level 3	flake tool	unifacially flaked shaping flakes (rounded)	51.12	32.26	12.06	Ocala Limestone
TU A, Level 3	flake tool	lateral & distal edge of SCR flake	39.68	33.44	20.2	Hillsborough River Chert
TU A, Level 3	flake tool	distal end of flake modified	25.9	11.7	5.6	
TU A, Level 3	flake tool	fractured bifacially modified flake	23.7	14.06	8.84	Hillsborough River Chert
TU A, Level 3	flake tool	Thin bifacial flake tool fractured	15.92	14.48	2.52	Suwannee Formation
TU A, Level 3	flake tool	scarring on lateral edges of flake SCR	59.18	24.82	13.12	Ocala Limestone

Provenience	Tool type	Description	Length (mm)	Width (mm)	Thick (mm)	Lithic Source
TU A, Level 3	flake tool	bifacial microscarring on lateral & distal edge of broken flake	42.16	30.4	5.26	Ocala Limestone
TU A, Level 3	flake tool	microscarring & shaping along distal SCR flake	44.26	34.98	13.6	
TU A, Level 3	flake tool	shaping & scarring at distal end of broken cortical flake	24.64	33.66	9.76	Hillsborough River Chert
TU A, Level 3	flake tool	worked lateral edges	39.44	36.08	8.72	Hillsborough River Chert
TU A, Level 3	flake tool	microscarring on proximal & lateral end of flake	30.36	31.72	8.2	Suwannee Formation
TU A, Level 3	flake tool	unifacially flaked on lateral edge of broken flake	29.44	20.44	7.5	Hillsborough River Chert
TU A, Level 3	flake tool	unifacial wear on lateral edge of flake	35.3	29.32	7.38	Hillsborough River Chert
TU A, Level 3	flake tool	microscarring on lateral edge of flake	41.36	38.54	13	
TU A, Level 3	flake tool	microscarring around distal edge of flake	21.58	21.56	4.3	Hillsborough River Chert
TU A, Level 3	flake tool	worked edge at distal end of flake	43.2	23.34	11.2	
TU A, Level 3	flake tool	flake scarring on distal & lateral edges of SCR	39.88	28.9	12.6	Hillsborough River Chert
TU A, Level 3	flake tool	microscarring on lateral edge of flake	48.8	32	21.42	Hillsborough River Chert
TU A, Level 3	flake tool	microscarring - distal edge	21.68	14.88	8.42	Ocala Limestone
TU A, Level 4	flake tool	bifacial microscarring on lateral edge of fractured flake	43.46	26.32	18.1	Hillsborough River Chert
TU A, Level 4	flake tool	microscarring on lateral & distal edge of PCR flake	41.78	35.44	12.96	
TU A, Level 4	flake tool	bifacial microscarring on lateral edge of fractured flake	46.78	27.2	14.54	Hillsborough River Chert
TU A, Level 4	flake tool	Bifacial microscarring - lateral edge of SCR	43.56	22.72	10.6	
TU A, Level 4	flake tool	unifacially flaked on distal & lateral edges	32.14	23.24	17.28	
TU A, Level 4	flake tool	bifacial microflake on lateral edge of SCR	48.98	37.12	12.84	Hillsborough River Chert
TU A, Level 3	preform	base of broken preform	38.68	31.6	11.64	Hillsborough River Chert
TU A, Level 3	preform	broken preform	45.16	39.22	11.68	Ocala Limestone
TU A, Level 3	preform base	base of fractured preform	37.1	44.48	16.78	Ocala Limestone

Provenience	Tool type	Description	Length (mm)	Width (mm)	Thick (mm)	Lithic Source
TU A, Level 3	prismati c blade		44.9	24.16	14.82	Hillsborough River Chert
TU A, Level 3	scraper		55.52	41.7	21.72	Hillsborough River Chert
TU A, Level 3	scraper		33.18	29.94	13.1	
TU A, Level 3	scraper	worked distal & lateral edge of PCR flake	51.48	33.44	15.02	Hillsborough River Chert
TU A, Level 3	scraper	thick shaped SCR flake	36.28	27.08	17.78	Ocala Limestone
TU A, Level 3	scraper	flaking on the sharp angle of a narrow block of debitage	42.7	35.48	20.76	Ocala Limestone
TU A, Level 3	scraper	flaking on sharp angle of thick block of piece	36.76	24.88	17.9	Hillsborough River Chert
TU A, Level 3	scraper	bifacially mod SCR - finer shaped	45.02	30.94	15.62	Ocala Limestone
TU A, Level 3	scraper	worked edge of fractured flake	35.82	29.26	14.66	Hillsborough River Chert
TU A, Level 3	scraper	Bifacial mod at distal and lateral edge of SCR flake	59.1	35.82	15.32	
TU A, Level 3	scraper	bifacial mod on distal lateral edge of PCR flake	48.6	33.74	23.72	Hillsborough River Chert
TU A, Level 3	scraper	unifacial scraper	46.64	33.12	17.52	
TU A, Level 3	scraper	made on complete flake with slight cortical residue	48	14.54	19	Hillsborough River Chert
TU A, Level 3	scraper		46.52	33	20.66	Hillsborough River Chert
TU A, Level 3	scraper		56	38.68	38.72	Hillsborough River Chert
TU A, Level 3	scraper		77.66	33.7	21.24	
TU A, Level 3	scraper		46.98	29.98	11.96	
TU A, Level 3	scraper		54.64	36.42	25.56	Hillsborough River Chert
TU A, Level 3	scraper		55.6	30.44	27.64	Suwannee Formation
TU A, Level 3	scraper	flaking on distal end of PCR	27.94	24.9	15.86	Hillsborough River Chert
TU A, Level 3	scraper		43.54	30.64	31.68	Hillsborough River Chert
TU A, Level 4	scraper	SCR shaped into blade-like scraper	45.26	26.94	9.14	Hillsborough River Chert
TU A, Level 4	scraper	end scraper	44.82	41.7	18.2	
TU A, Level 4	scraper		43.78	34.74	21.08	

Provenience	Tool type	Description	Length (mm)	Width (mm)	Thick (mm)	Lithic Source
TU A, Level 4	scraper	unifacially flaked around all margins	56.2	34.72	16.78	Hillsborough River Chert
TU A, Level 4	scraper		50.76	35.92	11.82	Suwannee Formation
TU 63, 20-80 cmbs	utilized flake	use wear on lateral & distal edges & broken flake	37.04	28.28	6.1	
TU 64, 35-40 cmbs	utilized flake	use wear on distal end of flake	55.52	32.52	23.1	
TU 65, 20-80 cmbs	utilized flake	use wear on lateral edge of flake	38.8	35.66	6.68	Suwannee Formation
TU A, Level 2	utilized flake	use wear on lateral edge of proximal flake	38.08	36.68	10.28	Hillsborough River Chert
TU A, Level 2	utilized flake	use wear at distal end of flake	30.52	19.88	9.22	
TU A, Level 2	utilized flake	use wear on lateral edge of proximal flake	41.28	35.32	12.9	
TU A, Level 3	utilized flake	use wear along lateral edge	34.88	17.82	9.88	Hillsborough River Chert
TU A, Level 3	utilized flake	use wear on dorsal spine of thick flake	44.86	25.46	16.72	Hillsborough River Chert
TU A, Level 3	utilized flake	shaped / abraded / rounded at distal end	29.64	28.24	10.84	Hillsborough River Chert
TU A, Level 3	utilized flake	use wear on distal end of flake	38.98	32.28	6.74	Ocala Limestone
TU A, Level 3	utilized flake	shaping / abrading - distal end of flake	37.8	41.1	119.12	
TU A, Level 3	utilized flake	use wear on lateral edge of flake	68.72	31.2	11.48	Hillsborough River Chert
TU A, Level 3	utilized flake	use wear on distal end of large pressure flake	26	19.74	4.92	Suwannee Formation
TU A, Level 3	utilized flake	use wear on lateral edge of SCR	59.36	22.84	14.98	
TU A, Level 3	utilized flake	use wear at distal end of SCR	54.4	28.76	17.82	Hillsborough River Chert
TU A, Level 3	utilized flake	use wear on lateral & distal edge	36.84	25.46	8.22	Suwannee Formation
TU A, Level 3	utilized flake	use wear along lateral & distal edge of flake	32	32.2	6.02	
TU A, Level 3	utilized flake	use wear along later & distal edge	61.58	34.96	8.64	Hillsborough River Chert
TU A, Level 3	utilized flake	use wear on distal edge of flake	57.72	38.2	13.28	
TU A, Level 3	utilized flake	use wear on the lateral & distal edges of complete flake	46.7	30.48	8.56	Hillsborough River Chert

Provenience	Tool type	Description	Length (mm)	Width (mm)	Thick (mm)	Lithic Source
TU A, Level 3	utilized flake	use wear on lateral edges	40.96	26.22	10.12	Ocala Limestone
TU A, Level 3	utilized flake	use wear on lateral & distal edge of broken flake	26.44	18.74	6.66	Hillsborough River Chert
TU A, Level 3	utilized flake	use wear along distal & lateral edge of flake	48.62	38.3	13.56	Hillsborough River Chert
TU A, Level 3	utilized flake	use wear on lateral edge of broken flake	17.3	17	2.08	Suwannee Formation
TU A, Level 3	utilized flake	heavy use wear on lateral edge of a thin noncortical flake	50.48	22.04	6.66	Ocala Limestone
TU A, Level 3	utilized flake	use wear on lateral edge of broken flake	30.24	14.08	4.24	Ocala Limestone
TU A, Level 3	utilized flake	use wear along lateral & distal edges of complete flake	45.82	18.12	8.1	Ocala Limestone
TU A, Level 3	utilized flake	use wear on lateral & distal edge of SCR flake	35.44	35.62	6.98	Hillsborough River Chert
TU A, Level 3	utilized flake	complete flake with use wear on broken lateral edge	43	23.84	8.98	Hillsborough River Chert
TU A, Level 3	utilized flake	distal & lateral edge displays use wear	25.28	23.3	7.86	
TU A, Level 3	utilized flake	thick flake with use wear along one lateral edge	30.84	30.2	14.42	
TU A, Level 3	utilized flake	use wear primarily at distal end of SCR flake	39.28	35.46	12.36	
TU A, Level 3	utilized flake	use wear on lateral edge of large thinning flake	38.94	30.82	15.2	
TU A, Level 3	utilized flake	use wear on lateral edges of SCR flake	55.1	24.08	10.46	
TU A, Level 3	utilized flake	use wear on margin of flake	30.3	19	3.94	Hillsborough River Chert
TU A, Level 3	utilized flake	use wear on lateral edge of flake	37.66	20.54	6.78	Hillsborough River Chert
TU A, Level 3	utilized flake	blade flake - use wear on lateral edge	41.3	15.82	6.1	Hillsborough River Chert
TU A, Level 3	utilized flake	use wear on lateral edge of broken flake	34.72	22.16	8.7	
TU A, Level 4	utilized flake	usewear on lateral edges of SCR flake	66.32	29.24	20.66	
TU A, Level 4	utilized flake	usewear on lateral edge of SCR	35.76	22.14	9.86	Hillsborough River Chert
TU A, Level 4	utilized flake	PCR with usewear at distal end	34.96	22.64	12.5	Hillsborough River Chert
TU A, Level 4	utilized flake	microscarring on lateral & distal edge of thin flake	33.18	26.64	6.64	Hillsborough River Chert

Provenience	Tool type	Description	Length (mm)	Width (mm)	Thick (mm)	Lithic Source
TU A, Level 4	utilized flake	usewear along lateral edge of thick SCR flake	46.1	43.7	21.32	Hillsborough River Chert
TU A, Level 4	utilized flake	shaping & abrading along lateral & distal edge	36.66	34.48	6.68	Hillsborough River Chert
TU A, Level 4	utilized flake	usewear along lateral & distal edge of flake	34	27.04	11.92	Ocala Limestone
TU A, Level 4	utilized flake	usewear on lateral edge of flake	32.5	28.9	14.62	Hillsborough River Chert
TU A, Level 4	utilized flake	usewear on lateral edge of fractured flake	33.62	26.84	4.58	Suwannee Formation
TU A, Level 4	utilized flake	usewear around margins of distal flake	43.56	36.14	4.28	
TU A, Level 4	utilized flake	use wear along lateral edges of flake	48.28	33.18	13.66	Ocala Limestone
TU A, Level 4	utilized flake	usewear on lateral edges of this SCR flake	52	32.42	25.8	Hillsborough River Chert
TU A, Level 4	utilized flake	usewear on dorsal spine of medial SCR flake	46.28	37.7	25.54	

Twenty-one cores were recovered. Most of the cores are unidirectional cores (n=14). Of the unidirectional cores, eleven are composed of Hillsborough River Chert and two from chert of the Ocala formation. A total of 16 of the cores are composed of Hillsborough River Chert and three of Ocala limestone; no cores are composed of chert from the Suwanee formation. All but two of the cores measure between approximately 3 to 4 cm in length, 2 to 3 cm in width, and 2 to 3 cm thick. One very reduced core composed of Hillsborough River Chert was also identified. Finally, one slightly larger unidirectional core measuring approximately 5 cm in length, 3 cm in width, and 3 cm thick was identified.

A total of 1176 flakes were recovered. The type of flake could be determined for 52 percent of the flakes (Table 4-5). Seventy-one percent of the flake assemblage consist of primary or secondary core reduction flakes. Over 50 percent (55.8%) of the flakes measure between 30-50 mm in size.

Table 4-5. Flake Type and Size

Flake type	0-10 mm	10-20 mm	20-30 mm	30-40 mm	40-50 mm	50-60 mm	60-70 mm	70-80 mm	Total
primary core reduction		6	23	89	83	28	2		231
secondary core reduction		15	28	67	55	33	12	2	212
shaping	3	27	17	26	12	3	1		89
thinning	11	40	10	9	4	2			76
notching	3	6							9
retouch		1							1
indeterminate		35	207	125	120	57	12	2	558
Total	17	130	285	316	274	123	27	4	1176

The chert source of the lithic artifacts was determined when possible. The chert source was determined for 59.1 percent of the artifacts. Most of the artifacts are composed of Hillsborough River Chert (73 percent), but the Ocala and Suwannee Formations are also represented (Table 4-6). There seems to be no significant correlation between flake type and chert source, as lithic artifacts from all stages of tool production were identified from each of the three chert sources.

Table 4-6. Chert Source of Lithics from 8HI14932

Chert Source	Total	%	Tool	%	Core	%	Flakes	%	Shatter	%
Hillsborough River Chert	702	73.0	59	64.8	16	84.2	494	72.3	133	78.7
Ocala Limestone	101	10.5	19	20.9	3	15.8	59	8.6	20	11.8
Suwannee Formation	159	16.5	13	14.3	0	0	130	19.0	16	9.5
Totals	962	100.0	91	100.0	19	100.0	683	100.0	169	100.0

Table 4-7. Chert Source of Lithic Flakes

Flake type	Hillsborough River Chert	Ocala Limestone	Suwannee Formation	Total
primary core reduction	118	10	9	137
secondary core reduction	108	12	17	137
shaping	33	5	13	51
thinning	31	2	6	39
notching	1	1	2	4
retouch	1	0	0	1
indeterminate	202	28	83	314
Total	494	59	130	683

Historic Artifacts

The historic artifacts recovered from TU A are consistent with types from the turn of the 20th century. Recovered historic artifacts include ceramics, glass, and metal (Figure 4-13).

Twelve ceramic sherds were recovered from the unit (Table 4-8). No temporally diagnostic attributes are present on these sherds. One whiteware rim sherd from a plate was identified. This specimen has a molded decoration below the rim. An ironstone rim sherd was from a larger vessel, possibly a platter or shallow basin, was also identified. The rest of the historic ceramic sherd assemblage is represented by stoneware. The stoneware sherds are likely from crocks.

Sixty-two glass fragments were recovered from Unit A (Table 4-9). The glass assemblage includes dark olive-green, solarized, aqua, light green, brown, clear, and cobalt blue fragments. Solarized glass has a purple tint from the exposure of magnesium to sunlight. Manganese dioxide was used to de-colorize bottle glass from the mid-1870s to 1920, with widespread use from 1890 to 1920 (Lockhart 2006). Although dark olive-green glass has a long time span, it was less common in the 20th century (Lindsey 2020). A fragment of a bottle with a crown finish post-dates 1892.

Figure 4-13: Historic Artifacts from 8HI14932

Table 4-8. Ceramics Recovered from TU A

Zone	Level	Depth	Count	Description
1	1	10-15	1	Stoneware; body sherd
1	1	10-15	1	Whiteware; body sherd
2	2	20-30	1	Ironstone; rim sherd
2	2	20-30	1	Whiteware, molded; rim sherd
2	2	20-30	1	Whiteware; body sherd
4	4	40-50	1	Whiteware; body sherd
4	4	40-50	1	Whiteware; base sherd
5	5	50-60	1	Stoneware; body sherd
5	5	50-60	3	Whiteware; body sherd
7	6	60-70	1	Redware; body sherd

An embossed base sherd from a rectangular bottle was identified. The embossing is identified as Eddy & Eddy Chemists. Eddy & Eddy was founded in St. Louis in 1879. This company manufactured primarily plant-based pantry items: extracts, spices, mustard, catsup, olive oil, baking powder, as well as perfume and laundry whiteners (Harper 2018). The company changed its name to Eddy & Eddy Manufacturing Company in 1905 (Marquis 1912). Therefore, this bottle fragment must date from the period between 1879 and 1905.

Metal artifacts were primarily recovered from levels 2-5, with only a couple nail fragments recovered from levels 7 and 8. Metal artifacts identified are primarily nails and nail fragments, including 14 small fence staples. Part of a knife was recovered from level 4. Also recovered from level 4 was a .22 caliber cartridge (post-1857).

Building material, friable sandy blocks and brick fragments, were noted in zones 2 and 3 but were not collected. A terrazzo fragment was recovered from ST 65.

Table 4-9. Glass Recovered from TU A

Zone	Level	Depth	Count	Part	Description
1	1	10-15	1	body	solarized
2	1	15-20	1	body	olive green, dark
2	1	15-20	3	body	clear
2	2	20-30	1	body	olive green, dark
2	2	20-30	2	body	brown
2	2	20-30	1	body	green
2	2	20-30	1	finish	clear; bottle; crown finish
2	2	20-30	1	flat	light green
2	2	20-30	3	body	aqua
2	2	20-30	1	body	solarized
2	2	20-30	15	body	clear
2	2	20-30	1	body	clear; thin
2	2	20-30	1	neck	clear
3	3	30-40	1	body	brown
3	3	30-40	1	body	cobalt blue
3	3	30-40	1	flat	light green
3	3	30-40	7	body	clear
3	3	30-40	1	body	clear; rectangular bottle; embossed A
3	3	30-40	1	base	clear; rectangular bottle; embossed EDDY / MISTS / 'S
4	4	40-50	4	body	clear
4	4	40-50	2	body	light aqua
4	4	40-50	2	body	solarized
4	4	40-50	2	flat	light green
4	4	40-50	1	body	clear
4	4	40-50	1	body	brown
4	4	40-50	1	body	olive green, dark
5	5	50-60	2	flat	light green
5	5	50-60	2	body	olive green, dark
5	5	50-60	1	body	clear

Table 4-10. Metal Artifacts from TU A

Zone	Level	Depth	Count	Weight	Description
2	2	20-30	1	2.2	nail fragment
3	3	30-40	1	5.7	nail, wire; 2.5 inch
3	3	30-40	2	2.3	strap iron
3	3	30-40	3	1.7	iron fragment
3	3	30-40	1	0.9	can fragment
3	3	30-40	1	1.5	nail, wire; 1.5 inch
3	3	30-40	4	2.5	nail, wire; 1 inch
3	3	30-40	1	4.9	nail, cut; 3 inch
3	3	30-40	7	11.4	staple, fence
3	3	30-40	12	14.4	nail fragment
4	4	40-50	1	38.6	knife
4	4	40-50	2	13.9	nail fragment
4	4	40-50	15	23.5	nail fragment
4	4	40-50	1	0.6	cartridge; .22 caliber
4	4	40-50	1	9.4	nail, wire; 3.5 inch
4	4	40-50	1	9.4	iron fragment
4	4	40-50	1	0.6	nail, wire; 1 inch
4	4	40-50	2	4.4	staple, fence
4	4	40-50	1	5.6	wire
4	4	40-50	10	14.6	iron fragment
5	5	50-60	8	6.4	iron fragment
5	5	50-60	1	0.7	iron fragment
5	5	50-60	4	13.1	staple, fence
5	5	50-60	1	7.6	nail, cut; 2.5 inch
5	5	50-60	1	9.6	nail, wire; 3.25 inch
5	5	50-60	8	15.4	nail fragment
5	7	70-80	1	1.6	staple, fence
5	8	80-90	1	4.7	nail fragment
7	6	60-70	1	0.4	iron fragment
7	6	60-70	1	3.7	wire

<u>Summary</u>

[redacted] appears to represent a mostly disturbed, possibly redeposited, site. [redacted] A combined analysis of soil stratigraphy and the artifact assemblage suggests several possible scenarios.

[redacted]

[redacted]

It is possible that the precontact component of the site was once a largely surficial, yet very dense, lithic scatter that was badly disturbed [redacted] The unimodal distribution of recovered lithics seems to be consistent with a single, intensive reduction event. The high numbers of flakes, flake tools and cores may indicate that the production of flakes and flake tools may have been the primary focus of activities at the site, rather than the production of bifaces. However, because the stratigraphic integrity of the site has been so badly compromised, it is not possible to more precisely determine the type of site it once represented.

It is also possible that the disturbed and lithic-bearing soils were redeposited here from another location. Perhaps these soils were shoved here from a nearby site during grading prior to school construction. It is also possible that these soils represent fill that was transported from an unknown location and dumped on this parcel [redacted]. The presence of historic artifacts dating to the turn of the 20th century suggest that these layers of disturbed soil were deposited [redacted].

There are several precontact archaeological sites in the area primarily along the Hillsborough River, ponds, or small drainages. However, very little is known about these lithic sites due to minimal testing. Most of the sites are small scatters of lithic flakes, [redacted].

The original historic ground surface appears to have been within Zone 4/Level 4 approximately 30 cm below current ground surface. Although, Zone 4 does also show signs of disturbance. Like the strata above, historic artifacts within zone 4 and 5 are consistent with a late 19th century/early 20th century date.

One in situ feature was identified at the site. A pit feature with two horseshoes and a horse bone was identified below the fill. The artifacts and bone suggest that the pit may be a horse burial but most of the pit was outside the test unit and was therefore not fully investigated during the survey. The pit could be associated with troop encampments from the Spanish-American War in 1898. However, because no military artifacts were recovered during any archaeological testing at the site, it seems very unlikely that a military camp was located on this parcel. It is also equally unlikely that a dead horse would have been buried within a military camp. Rather, it would seem much more likely that dead animals from military camps in the area would have been transported outside the campgrounds for disposal. Therefore, if the horse burial is indeed related to the Spanish-American War, this feature most likely represents the outer edge of a campground rather than the campground itself. Again, because no diagnostic military artifacts were recovered from the site, it is also equally plausible that this feature is related to a turn-of-the-century pioneer.

No temporally diagnostic lithic artifacts were recovered from the site. Based on the lack of pottery, the precontact component of the site likely dates to the Archaic period. The historic component dates to the late 19th or early 20th century. No historic artifacts were recovered directly associated with Spanish-American War troops. The precontact component represents a badly disturbed and possibly redeposited site. Due to the disturbed nature of the site, it is considered NRHP-ineligible due to lack of integrity.

5. CONCLUSIONS

No newly or previously archaeological sites were identified within [redacted].

[redacted] Additional testing within the site suggests that the precontact site is redeposited from an unknown location. A total of 1628 lithic artifacts were recovered from eight shovel tests and one 2 by 1 meter test unit. No temporally diagnostic artifacts were recovered, but based on the lack of pottery, the precontact artifacts likely date to the Archaic period. The late 19th-early 20th century component is also primarily in disturbed contexts except a pit feature which may be a horse burial. No historic artifacts were recovered directly associated with Spanish-American War troops. Due to the disturbed context and lack of integrity, [redacted] is considered NRHP-ineligible.

Unanticipated Finds

Should construction activities uncover any archaeological material, it is recommended that activity in the immediate area be stopped while a professional archaeologist evaluates the material. If human remains are found during construction or maintenance activities, Chapter 872.05, *F.S.* applies and the treatment of human remains will conform to Chapter 3 of the FDOT *CRM Handbook*, Section 7-1.6 of the *FDOT's Standard Specifications for Road and Bridge Construction*, and Stipulation XI of the Section 106 Programmatic Agreement, which require that all work cease immediately in the area of the human remains. Chapter 872.05 states that, when human remains are encountered, all activity that might disturb the remains shall cease and may not resume until authorized by the Hillsborough County Medical Examiner or the State Archaeologist. The Hillsborough County Medical Examiner has jurisdiction if the remains are less than 75 years old or if the remains are involved in a criminal investigation. The State Archaeologist has jurisdiction if the remains are 75 years of age or more.

If previously unidentified historic properties are discovered before or during construction, the potential to affect historic properties changes after the Section 106 review has been completed, or if unanticipated impacts to historic properties occur during construction, then the consultation process outlined in Stipulation VII of the Section 106 Programmatic Agreement will be followed in accordance with 36 CFR 800.13 and Stipulation X of the Section 106 Programmatic Agreement.

Curation

The updated FMSF form (Appendix A) and survey log (Appendix B) are curated at the FMSF, along with a copy of this report. Artifacts, field notes, and other pertinent project records are temporarily stored at Janus Research until their transfer to FDOT curation facilities.

6. REFERENCES

Anderson, David G.

1979 Prehistoric Selection for the International Thermal Alteration: Tests of a Model Employing Southeastern Archaeological Materials. *Mid-Continental Journal of Archaeology* 2:221–251.

Austin, Robert J.

1996 Prehistoric Chert Procurement and Mobility Strategies on the Lake Wales Ridge. *The Florida Anthropologist* 49(4):218–221.

1997 The Economics of Lithic-Resource Use in South-Central Florida. Unpublished Ph.D. Dissertation, University of Florida, Gainesville. Copy on file, Janus Research, St. Petersburg.

Austin, Robert, and Richard Estabrook

2000 Chert Distribution and Exploitation in Peninsular Florida. *The Florida Anthropologist*. 53:116–130.

Ballo, George R.

1985 Experiments in Use-wear Formation on Stone Tools Made From Florida Cherts: A Study Supporting a Microwear Analysis of Paleo-Indian Lithic Artifacts From the Harney Flats Site, Tampa, Florida. Unpublished Master's thesis, Department of Anthropology, University of South Florida, Tampa.

Bar-Yosef, O., B. Vandermeersch, B. Arensburg, A. Belfer-Cohen, P. Goldberg, H. Laville, L. Meignen, Y. Rak, J. D. Speth, E. Tchernov, A. M. Tillier, and S. Weisner

1992 The Excavation at Kebara Cave. *Current Anthropology* 33(5):497–550.

Brink, John W.

1978 *An Experimental Study of Microwear Formation on Endscrapers*. National Museum of Canada, Man Mercury Series, Archaeological Survey of Canada, Paper Number 83.

Collins, Michael B., and Jason M. Fenwick

1974 Heat Treatment of Chert: Methods of Interpretation and Their Application. *Plains Anthropologist* 19(64):134–145.

Crabtree, Don E.

1972 *An Introduction to Flintworking*. Occasional Papers of the Idaho State Museum, Number 28 (Second Edition), Pocatello, Idaho.

Endonino, Jon C.

2007 A Reevaluation of the Gainesville, Ocala, and Lake Panasoffkee Quarry Clusters. *The Florida Anthropologist* 60(2-3):19-38.

Goodyear, A. C., S. B. Upchurch, M. J. Brooks and N. N. Goodyear

1983 Paleo-Indian Manifestations in the Tampa Bay Region, Florida. *The Florida Anthropologist* 36:40–66.

Harper, Drake V

2018 The garden and the gateway arch / two iconic and uniquely St. Louis, MO institutions. Electronic document, https://medium.com/@TheDrakeHarper/the-garden-and-the-gateway-arch-two-iconic-and-uniquely-st-louis-mo-institutions-a6ec7047d30e, accessed May 13, 2020.

Janus Research

2018 *CRAS Update TIS SEIS I-275 from Howard Frankland Bridge to North of Dr. Martin Luther King, Jr. Blvd and I-4 from I-275 to East of 50th St with New Alignment from I-4 South to the Existing Selmon Expressway and Improvements to the Selmon Expressway*. FMSF Manuscript No. 25713. Manuscript on file, Florida Division of Historical Resources, Tallahassee.

2020 *CRAS Update Addendum Technical Memorandum TIS SEIS I-275 from Howard Frankland Bridge to North of Dr. Martin Luther King, Jr. Blvd and I-4 from I-275 to East of 50th St with New Alignment from I-4 South to the Existing Selmon Expressway from the Kennedy Boulevard Overpass East to Maydell Drive*. Manuscript on file, Florida Division of Historical Resources, Tallahassee.

Keller, C. M.

1966 The Development of Edge Damage on Stone Tools. *Man* 1:501–511.

Lindsey, Bill

2020 Historic Glass Bottle Identification and Information Website. Electronic document, http://www.sha.org/bottle/.

Lockhart, Bill

2006 The Color Purple: Dating Solarized Amethyst Container Glass. Historical Archaeology 40(2):45-56.

Mandeville, M. M. and J. J. Flenniken

1974 Newhaka Chert Before and After Thermal Pretreatment. *Plains Anthropologist* 19(64):146–148.

Marquis, Albert Nelson (editor)

1912 A Biographical Dictionary of Leading Living Men of the City of St. Louis and Vicinity. A.N. Marquis & Company, Chicago.

n.a

1898 Spanish-American War Encampments Maps. Electronic documents, http://luna.tampabayhistorycenter.org/luna/servlet, accessed May 13, 2020.

Odell, George Hamley
1980 Butchering with Stone Tools: Some Experimental Results. *Lithic Technology* 9(2):39–48.
1981 The Mechanics of Use-breakage of Stone Tools: Some Testable Hypothesis. *Journal of Field Archaeology* 8:197–209.

Pelegrin, J., C. Karlin, and P. Bodu
1988 *Chaines operatoires: un outil pour le prehistorien*. Technologie prehistorique, Paris CNRS, Monographies Techniques 25, pp.55–62.

Purdy, Barbara A.
1981 *Florida's Prehistoric Stone Tool Technology*. University of Florida Press, Gainesville.

Rick, John W.
1978 *Heat Altered Cherts of the Lower Illinois Valley: An Experimental Study in Prehistoric Technology*. Northwestern Archaeological Program Prehistoric Records Number 2.

Schindler, D. L., J. W. Hatch, C. A. Hay, and R. C. Bradt
1982 Aboriginal Thermal Alteration of Central Pennsylvania Jasper: Analytical and Behavioral Implications. *American Antiquity* 47(3):526–544.

Ste. Claire, Dana
1987 The Development of Thermal Alteration Technologies in Florida: Implications for the Study of Pre-Columbian Adaptation. *Florida Anthropologist* 40:203–208.

Tringham, R.E., G. Cooper, G. Odell, B. Voytek, and A. Whitman
1974 Experimentation in the Formation of Edge Damage: A New Approach to Lithic Analysis. *Journal of Field Archaeology* 1:171–196.

Upchurch, Sam B., Richard N. Strom, and Mark G. Nuckels
1982 Methods of Provenance Determination of Florida Cherts. Manuscript on file, Florida Division of Historical Resources, Tallahassee.

Vaughan, Patrick C.
1985 *Use-wear Analysis of Flaked Stone Tools*. The University of Arizona Press, Tucson.

Whittaker, John C.
1994 *Flintknapping: Making and Understanding Stone Tools*. University of Texas Press, Austin.